# Massachusetts Recovery: Clean Energy Dollars at Work Greater Boston and Northeast Massachusetts Project Summaries

# **Recovery Grants and Projects**

# **Amesbury** - \$150,000

The Town of Amesbury used funding to install a 39 kW Solar PV system at the high school.

## **Bedford - \$150,000**

• The Town of Bedford will use funding for a new energy management and ventilation system at Lt. Job Lane Elementary School.

## Bedford, Jet Aviation of America Inc. - \$117,625

 Commonwealth Solar rebate from the Massachusetts Clean Energy Center (MassCEC) for a 113 kW system.

# Belmont, Massachusetts Audubon Society - \$13,800

• Commonwealth Solar rebate from the MassCEC for a 9 kW system.

# **Beverly, Aero Manufacturing Corp. - \$118,360**

• Commonwealth Solar rebate from the MassCEC for a 110 kW system.

# Boston, Boston College High School - \$161,170

Commonwealth Solar rebate from the MassCEC for a 197 kW system.

# Boston, Castle Square Tenant's Organization - \$4.4 million

- Castle Square, a low-income apartment complex in Boston, will use stimulus funds to renovate four buildings, which include 192 housing units. The buildings will be wrapped in superinsulation, air sealed, and equipped with high-efficiency windows and upgraded mechanical systems.
- The project promises to be among the most ambitious Deep Energy Retrofits at existing multi-family housing complexes in the country, reducing the building's energy consumption by a projected 50 percent.

# Boston, Constitution Center, LLC - Bldg 2 - \$54,820

Commonwealth Solar rebate from the MassCEC for a 42 kW system.

# Boston, Constitution Center, LLC - Bldg 1 - \$162,435

Commonwealth Solar rebate from the MassCEC for a 200 kW system.

# Boston, CV Drydock LLC - 21 Drydock - \$145,660

Commonwealth Solar rebate from MassCEC for a 166 kW system.

# Boston, CV Drydock LLC - 23 Drydock - \$161,060

Commonwealth Solar rebate from the MassCEC for a 197 kW system.

# Boston, CV Drydock LLC - 25 Drydock - \$161,060

Commonwealth Solar rebate from the MassCEC for a 197 kW system.

# Boston, Greater Boston Food Bank - \$162,355

Commonwealth Solar rebate from MassCEC for a 200 kW system.

# **Boston, Massachusetts Port Authority** – \$170,500

 \$170,500 in stimulus funds will leverage \$304,839 in outside capital to fund the installation of a 365kW solar PV system at Logan Airport's Terminal A and Terminal A satellite buildings.

# Boston, Mass. Energy Consumer's Alliance - \$250,000

- Mass. Energy Consumer's Alliance's program will use stimulus funds to dramatically increase enrollment in utility-run rebate programs and other existing energy efficiency programs.
- Its broad consumer alliance network, as well as project partners' regional community groups, will bring energy efficiency to numerous households throughout the Commonwealth.

# Boston, Massachusetts College of Art – \$247,582

• Funding will support the implementation of an Enterprise Energy Management System, including installation of real-time building-level metering of electricity, natural gas, and steam at ten buildings totaling 825,200 square feet.

# Boston, Sullivan's Castle Island LLC - \$9,225

Commonwealth Solar rebate from the MassCEC for a 6 kW system.

## Boston, VFW Parkway Car Wash - \$48,340

• Commonwealth Solar rebate from the MassCEC for a 37 kW system.

## Cambridge, Shady Hill School - Gym - \$101,740

Commonwealth Solar rebate from the MassCEC for an 89 kW system.

## Charlestown, Bunker Hill Community College - \$229,938

 Funding will support the implementation of an Enterprise Energy Management System, including installation of real-time building-level metering of electricity, natural gas, fuel oil, and steam at eight buildings totaling 535,235 square feet.

## **Chelmsford - \$150,000**

 The Town of Chelmsford will use funding to install a 21kW Solar PV system at Chelmsford High School

## Chelmsford, Princeton Commons – Bldg 2 - \$24,150

Commonwealth Solar rebate from the MassCEC for a 16 kW system.

# Chelmsford, Princeton Commons – Bldg 3 - \$39,180

Commonwealth Solar rebate from the MassCEC for a 27 kW system.

## Chelmsford, Princeton Commons – Bldg 4 - \$24,150

Commonwealth Solar rebate from the MassCEC for a 16 kW system.

## Chelsea, Atlas Historic Development, LLC - \$56,660

• Commonwealth Solar rebate from the MassCEC for a 44 kW system.

# Chelsea, Eastern Avenue Holdings, LLC - \$161,170

Commonwealth Solar rebate from MassCEC for a 197 kW system.

# Chelsea, Chelsea Soldier's Home - \$199,210

• Funding will support the implementation of an Enterprise Energy Management System, including installation of real-time building-level metering of electricity, natural gas, and steam at nine buildings totaling 539.342 square feet.

## Concord, Concord Correctional Complex - \$631,231

 Funding will support the implementation of an Enterprise Energy Management System, including installation of real-time building-level metering of electricity, natural gas, fuel oil, and steam at 27 buildings totaling 596,598 square feet at MCI Concord and Northeastern Correctional Center.

# Concord, Northeastern Correctional Center - \$257,600

• The money will fund the installation of a 103kW ground-mounted self-tracking solar PV system at the Northeastern Correctional Facility.

## **Concord - \$150,000**

 The Town of Concord used funding to install a 48.4 kW Solar PV system at the Willard Elementary School.

## **Danvers, North Shore Community College - \$185,150**

• Funding will help finance the installation of a 74 kW roof-mounted solar PV system at North Shore Community College.

# **Dedham - \$150,000**

- The Town of Dedham will use funding to install an energy management system at the Greenlodge Elementary School and the Early Childhood Education Center
- These projects are part of a larger performance contract with Siemens that includes efficiency upgrades in 13 municipal buildings.

## **Dorchester, IBEW Local 103** - \$148,040

Commonwealth Solar rebate from the MassCEC for a 171 kW system.

## Dorchester, UMass Boston - \$185,150

Funding will help finance the installation of a 74 kW solar PV system at Umass Boston.

## Framingham, Framingham Correctional Complex - \$481,182

 Funding will support the implementation of an Enterprise Energy Management System, including installation of real-time building-level metering of electricity and gas at 20 buildings totaling 421,898 square feet at MCI Framingham and South Middlesex Correctional.

## Framingham, Framingham State University - \$243,800

 Stimulus funding will help finance the installation of a 98 kW solar PV system at Framingham State University.

## Framingham, Ratner Realty LLC - \$117,625

Commonwealth Solar rebate from the MassCEC for a 110 kW system.

# Framingham, NDNE 9/90 Crossing LLC - \$114,200

Commonwealth Solar rebate from the MassCEC for a 103 kW system.

# Haverhill, Spruce Environmental Technologies Inc. - \$91,250

Commonwealth Solar rebate from MassCEC for a 79 kW system.

## Hamilton - \$150,000

- The Town of Hamilton will use grant funding specifically towards window upgrades at the historic Town Hall, as well as to add insulation and replace the boiler at the Council on Aging building.
- These projects are part of a larger performance contract with Johnson Controls that encompasses a number of energy efficiency improvements across three town buildings.

# **Ipswich - \$150,000**

• The Town of Ipswich installed a 33.6kW Solar PV system on the roof of the Ipswich Town Hall.

## Ipswich, Architectural Heritage Foundation – The Appleton Farms - \$650,000

Architectural Heritage Foundation, in partnership with Historic New England and The Trustees
of Reservations, will complete Deep Energy Retrofits at three historic properties in the
Commonwealth using stimulus funds. As part of this project, the Appleton Farms will be superinsulated and aggressively air-sealed, as well as equipped with efficient boilers, lighting, and
solar thermal water heaters. The renovation will strive to reduce the properties' energy
consumption by 50 percent while maintaining their cultural and historic character.

## Jamaica Plain, Lemuel Shattuck Hospital - \$172,882

• Funding will support the implementation of an Enterprise Energy Management System, including installation of real-time building-level metering of electricity and gas at 21 buildings totaling 442,832 square feet.

# Lawrence, Lawrence CommunityWorks - Union Crossing Building - \$550,000

Lawrence CommunityWorks, a community-based development group, will utilize stimulus funds
to help finance the retrofit of an old mill building that will include installation of efficient air-source
heat pump technology, thick insulation, high-efficiency windows, and aggressive air sealing.
The finished building will include 125 affordable housing units, a daycare, and commercial
space. The building, Union Crossing, will provide a model energy renovation of old mill
masonry buildings, a typical building type in the Commonwealth.

## **Lawrence, Merrimack Valley Chamber of Commerce - \$500,000**

The Merrimack Valley Chamber of Commerce will partner with Nexamp, Inc. of North Andover
to provide Merrimack Valley's businesses and industries with turnkey energy efficiency
solutions. Using stimulus funds, this engagement program will target immediate energy savings
in the Commercial and Industrial sector. The program will also partner with regional banks to
help finance various projects.

# **Lexington - \$150,000**

 The Town of Lexington used funding to replace a boiler at the Lexington Public School's central administration building.

## Lowell, BPV Lowell LLC - \$161,830

• Commonwealth Solar rebate from the MassCEC for a 199 kW system.

# Lowell, United Teen Equality Center – \$1.9 million

- Founded in 1999 as a positive response to local gang violence, United Teen Equality Center (UTEC) is a youth-led agency that blends a drop-in, safe-haven center with more structured workforce development and educational programming.
- The organization will use stimulus funds to renovate its Lowell facility, by combining building envelope treatment with passive heating and cooling techniques, reducing energy consumption by 50 percent.

#### Lowell, UMass Lowell – \$616,661

 Stimulus funding will help finance the installation of a 245 kW roof-mounted solar PV system at UMass Lowell.

## Lowell, UMass Lowell – \$761,013

• Funding will support the implementation of an Enterprise Energy Management System, including installation of real-time building-level metering of electricity and gas at 45 buildings totaling 2,739,741 square feet.

# Medford, ND Mystic Office Center LLC. - \$113,675

Commonwealth Solar rebate from the MassCEC for a 102 kW system.

#### **Melrose -** \$150,000

 The Town of Melrose will use funding to install a 19 kW Solar PV system at Melrose Veterans Memorial Middle School.

#### Milton - \$150,000

 The grant funding was used toward a 28.3 kW solar PV installation on the roof of the Milton Town Hall.

# **Newburyport** - \$116,190

 The Town of Newburyport used funding to implement thermal efficiency measures at Kelley School Community Youth Center that included modernizing the exhaust system, air-sealing the building, insulating the attic and upgrading the steam and air handling systems.

# Newburyport, The Governor's Academy - Alumni Gymnasium - \$44,840

• Commonwealth Solar rebate from the MassCEC for a 32 kW system.

#### North Andover - \$103,846

The Town of North Andover used funding to install a 21 kW Solar PV system at the high school.

# **Quincy, Chickatawbut Hill - \$120,750**

• Commonwealth Solar rebate from the MassCEC for a 48 kW system.

## Quincy, Jay Cashman Inc. - \$38,500

• Commonwealth Solar rebate from the MassCEC for a 26 kW system.

#### **Reading** - \$150,000

- The Town of Reading completed a conversion project from steam to hot water heating at the Birch Meadow Elementary School.
- This project was part of a larger performance contract with encompassed a number of energy efficiency improvements across Reading's municipal buildings.

## Roslindale, Boston Pre-Release Center - \$96,156

 Funding will support the implementation of an Enterprise Energy Management System, including installation of real-time building-level metering of electricity and gas at one building totaling 45,460 square feet.

# Salem, Hawthorne Hotel - \$1.4 million

 Nexamp, Inc of North Andover will complete a Deep Energy Retrofit at Salem's historic Hawthorne Hotel, switching the hotel to geothermal heating and cooling. The Hotel will also upgrade its mechanical systems and lighting to be more efficient. This project will provide a compelling demonstration of an energy-efficienct renovation that preserves the important historic character of the building.

# Salem, Salem State University - \$370,300

• Stimulus funding will help finance the installation of a 148 kW roof-mounted solar PV system at Salem State University.

# Salem, Salem State University - \$443,827

• Funding will support the implementation of an Enterprise Energy Management System, including installation of real-time building-level metering of electricity and gas at 27 buildings totaling 1,309,629 square feet.

# **Somerville, Grossman Marketing Group - \$162,435**

• Commonwealth Solar rebate from the MassCEC for a 200 kW system.

## Somerville, Herb Chambers 193 Inc. - \$112,230

Commonwealth Solar rebate from the MassCEC for a 100 kW system.

# Saugus - \$150,000

• The Town of Saugus just installed four new gas high-efficiency condensing hot water boilers, three new hot water pumps and new piping at Belmonte Middle School.

## **Sudbury** - \$141,864

• The Town of Sudbury will use funding to install a 5.17 kW solar PV and solar thermal system at Fairbank Road Community Center.

# **Tewksbury, DR-LMP Ames Pond 100-200 LLC.** - \$126,210

Commonwealth Solar rebate from the MassCEC for a 127 kW system.

## Tewksbury, DR-LMB Ames Pond 100-200 LLC. - \$123,565

Commonwealth Solar rebate from the MassCEC for a 122 kW system.

## **Tewksbury, Tewksbury State Hospital - \$461,992**

• Funding will support the implementation of an Enterprise Energy Management System, including installation of real-time building-level metering of electricity and gas at 29 buildings totaling 1,304,622 square feet.

## Tyngsborough, The Tyngsborough Sports Realty Trust - \$112,900

Commonwealth Solar rebate from the MassCEC for a 101 kW system.

# Tyngsborough, Transmed USA Inc. - \$111,170

Commonwealth Solar rebate from the MassCEC for a 99 kW system.

# Wakefield - \$150,000

- The Town of Wakefield used funding to replace a boiler at the Wakefield Memorial High School, as part of a larger energy savings performance contract that encompasses multiple efficiency improvements across all municipal buildings.
- The Town has also received an award of technical assistance consulting services to assist with the performance contract.

# Waltham, Architectural Heritage Foundation - The Lyman Estate - \$650,000

• Architectural Heritage Foundation, in partnership with Historic New England and The Trustees of Reservations, will renovate three historic properties in the Commonwealth using stimulus funds. As part of this project, the Lyman Estate will undergo a historically sensitive retrofit that includes aggressive air sealing, additional insulation, and the installation of a high-efficiency condensing boiler. The renovation will strive to reduce the properties' energy consumption by 50 percent while maintaining their cultural and historic character.

## Waltham, Tick Tock LLC - \$38,950

Commonwealth Solar rebate from the MassCEC for a 26 kW system.

## Watertown - \$150,000

- Watertown has installed a 50 kW solar PV system on the roof of the town's DPW building, which
  was a power purchase agreement with Broadway Electric.
- Watertown also received an award of technical assistance consulting services to assist with this
  project.

## Watertown, Watertown Police Station - \$40,920

Commonwealth Solar rebate from the MassCEC for a 28 kW system.

## Wayland, Russels Garden Center - \$37,125

Commonwealth Solar rebate from the MassCEC for a 25 kW system.

## Wayland, Mainstone Farm - \$47,330

Commonwealth Solar rebate from the MassCEC for a 35 kW system.

## Wellesley - \$150,000

 The Town of Wellesley used funding to install a 60 kW solar PV project at the Municipal Light Plant Garage/Warehouse.

## Wenham - \$150,000

- Wenham will replace windows and install new boilers at both the Wenham Fire Station and the Council on Aging buildings. Wenham will also install storm windows at the historic Iron Rail Building.
- These measures are part of a larger performance contracting project across all Wenham municipal facilities.

# **West Newbury** - \$132,390

 The Town of West Newbury will use funding to implement thermal efficiency measures at the Dr. John C. Page School and to install a 2.1 kW Solar PV system adjacent to the Town's DPW garage and office.

## Westford - \$150,000

• The Town of Westford will install a 30kW solar PV installation at the Stony Brook Middle School.

# Wilmington, Consolidated Marketing Services - \$136,868

Commonwealth Solar rebate from the MassCEC for a 149 kW system.

## Winchester - \$150,000

• The Town of Winchester will install a heating and ventilating system at the Muraco Elementary School,

## Winthrop - \$150,000

• The Town of Winthrop will use funding to convert the existing Town Hall heating plant to a high efficiency gas fueled boiler.

## Winthrop, Massachusetts Water Resources Authority- Deer Island – \$1,137,500

 Stimulus funding will leverage \$1,562,500 in outside capital to finance the installation of a 234kW parking lot ground mount and a 221 kW roof-mounted solar PV system on the Massachusetts Water Resources Authority's Deer Island water treatment facility.

## **Statewide ARRA Initiatives**

- \$3.3 million of ARRA funding was provided to the Division of Capital Asset Management for addition staffing resources to dramatically increase energy projects at state facilities. The funding is expected to leverage 15 projects in Greater Boston and northeastern Massachusetts. To date, the following leveraged projects are underway:
  - Comprehensive Energy Conservation Project at State Police facilities, including the State Police Headquarters in Framingham
  - Comprehensive Energy Conservation Project at North Shore Community College in Lynn/Danvers
  - Comprehensive Energy Conservation Project at Northern Essex Community College in Haverhill
  - Comprehensive Energy Conservation Project at Framingham State University
  - Comprehensive Energy Conservation Project at various Bureau of State Office Building facilities, including the State House, McCormack Building, Hurley Building, Lindemann Building, and ITD Data Center
  - Comprehensive Energy Conservation Project at Salem State University
  - o Comprehensive Energy Conservation Project at Bunker Hill Community College
  - 52 kW Solar PV project at Massachusetts Department of Environmental Protection Wall Experiment Station in Lawrence.

- \$825,000 of American Recovery and Reinvestment Act (ARRA) funding was awarded through
  the Department of Energy Resources' (DOER) Green Communities Division to provide technical
  assistance consulting services to Massachusetts municipalities for energy efficiency and
  renewable energy projects. This includes \$160,000 worth of technical consulting services to
  five municipalities in the Greater Boston and northeastern Massachusetts region.
- \$8 million of American Recovery and Reinvestment Act (ARRA) funding was provided to the MassCEC to install 8 MW of solar capacity across the Commonwealth, leveraging \$32 million of additional funding. This includes 30 projects in Greater Boston and northeastern Massachsuetts.
- **\$8.2 million** of American Recovery and Reinvestment Act (ARRA) funding was provided through the Department of Energy Resources to the Division of Capital Asset Management (DCAM) and other state entities to support a comprehensive solar stimulus effort that will install nearly 4 megawatts (MW) of solar PV capacity at state facilities. This includes seven projects in northeastern Massachusetts listed above.
- \$10 million of American Recovery and Reinvestment Act (ARRA) funding is being used by the Department of Energy Resources to implement an Enterprise Energy Management System that will measure real-time energy use and identify efficiency opportunities at more than 400 buildings, covering 17 million square feet of state government facilities, resulting in energy savings between 5 percent and 15 percent. This includes 10 complexes in Greater Boston and northeastern Massachusetts, listed above.
- \$175,000 of American Recovery and Reinvestment Act (ARRA) funding was awarded by the
  Department of Energy Resources' (DOER) Green Communities Division to provide building
  energy code training to all municipal building code officials at no cost. Greater Boston and
  northeastern Massachusetts municipalities have been participating in this training.
- \$500,000 of American Recovery and Reinvestment Act (ARRA) funding was invested by the Department of Energy Resources' (DOER) Green Communities Division in the development and implementation of an online tool known as MassEnergyInsight (MEI) available to all 351 municipalities at no cost to track their energy consumption and costs. This tool allows municipalities to make more informed decisions related to their energy needs. Greater Boston and northeastern Massachusetts municipalities have been trained on the tool and are actively using it.